UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF NEW YORK

MUZAKKIR HOSSAIN, and SHAKHAWAT HASSAN, individually and on behalf of all others similarly situated,

Plaintiffs,

v.

MEDIASTAR LIMITED d/b/a CHORKI and TRANSCOM LIMITED,

Defendants.

Case No.

CLASS ACTION COMPLAINT

JURY TRIAL DEMANDED

Dated: February 16, 2024

BURSOR & FISHER, P.A.

Yitzhak Kopel Max S. Roberts Victoria X. Zhou 1330 Avenue of the America, 32nd Floor New York, NY 10019

Telephone: (646) 837-7150 Facsimile: (212) 989-9163 E-Mail: ykopel@bursor.com mroberts@bursor.com vzhou@bursor.com

Attorneys for Plaintiffs

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Plaintiffs Muzakkir Hossain and Shakhawat Hassan ("Plaintiffs"), individually and on behalf of all other persons similarly situated, by and through their attorneys, make the following allegations pursuant to the investigation of their counsel and based upon information and belief, except as to allegations specifically pertaining to themselves and their counsel, which are based on personal knowledge.

NATURE OF THE ACTION

- 1. This is a class action suit brought against Defendants Mediastar Limited d/b/a Chorki ("Mediastar") and Transcom Limited ("Transcom," and collectively "Chorki" or "Defendants") for violating the Video Privacy Protection Act ("VPPA").
- 2. The United States Congress passed the VPPA in 1988, seeking to confer onto consumers the power to "maintain control over personal information divulged and generated in exchange for receiving services from video tape service providers." S. Rep. No. 100-599, at 8. "The Act reflects the central principle of the Privacy Act of 1974: that information collected for one purpose may not be used for a different purpose without the individual's consent." *Id.*
- 3. The VPPA prohibits "[a] video tape service provider who knowingly discloses, to any person, personally identifiable information concerning any consumer of such provider." 18 U.S.C. § 2710.
- 4. Defendants produce a wide variety of pre-recorded videos that are watched by millions of consumers nationwide. These platforms are accessible via browser on Chorki's website, as well as on mobile via the Chorki App on Android and Apple devices (collectively, the "App" or "Chorki App").
- 5. Unbeknownst to Plaintiffs and Class Members, however, Defendants knowingly and intentionally disclose their users' personally identifiable information—including a record of every video viewed by the user—to unrelated third parties.

- 6. Indeed, although users have no knowledge of Defendants' Privacy Policy and do not consent to it, Defendants admit in their Privacy Policy, for example, (i) that Defendants "may share your location with certain third-parties for analytics and advertising purposes," (ii) that Defendants and other "third-party advertisers and/or service providers [] may use a variety of technologies that automatically or passively collect information about how the [Chorki App and Chorki Website are] accessed and used" (*i.e.*, the videos consumers watch), and (iii) that "Chorki may automatically share your activity" with social media platforms, "including the content you use and such information may be attributed to your account on the ... platform and published on such service."
 - 7. Through these actions, Defendants are violating the VPPA.
- 8. Plaintiffs bring this action for damages and other legal and equitable remedies resulting from Defendant's violations of the VPPA.

FACTUAL BACKGROUND

I. HISTORY AND OVERVIEW OF THE VPPA

8. The impetus for the VPPA begins with President Ronald Reagan's nomination of Judge Robert Bork to the United States Supreme Court. During the confirmation process, a movie rental store disclosed the nominee's rental history to the Washington City Paper which then published that record. Congress responded by passing the VPPA, with an eye toward the digital future. As Senator Patrick Leahy, who introduced the Act, explained:

It is nobody's business what Oliver North or Pratik Bork or Griffin Bell or Pat Leahy watch on television or read or think about when they are home. In an area of interactive television cables, the growth of computer checking and check-out counters, of security systems and telephones, all lodged together in computers, it would be relatively easy at some point to give a profile of a person and tell

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¹ PRIVACY POLICY, https://www.chorki.com/privacy-policy.

what they buy in a store, what kind of food they like, what sort of television programs they watch, who are some of the people they telephone. I think that is wrong.

- S. Rep. 100-599, at 5-6 (internal ellipses and brackets omitted).
- 9. In 2012, Congress amended the VPPA, and in doing so, reiterated the Act's applicability to "so-called 'on-demand' cable services and Internet streaming services [that] allow consumers to watch movies or TV shows on televisions, laptop computers, and cell phones." S. Rep. 112-258, at 2.
- 10. The VPPA prohibits "[a] video tape service provider who knowingly discloses, to any person, personally identifiable information concerning any consumer of such provider." 18 U.S.C. § 2710(b)(1). The VPPA defines personally identifiable information ("PII") as "information which identifies a person as having requested or obtained specific video materials or services from a video service provider." 18 U.S.C. § 2710(a)(3). A video tape service provider is "any person, engaged in the business, in or affecting interstate or foreign commerce, of rental, sale, or delivery of prerecorded video cassette tapes or similar audio visual materials." 18 U.S.C. § 2710(a)(4).

II. DEFENDANTS ARE VIDEO TAPE SERVICE PROVIDERS

11. Chorki is "the leading Bangladeshi subscription on-demand video streaming platform focused on providing world-class Bangla language content."² Chorki monetizes its extensive viewership with subscriptions.

² Ruhul Kader, *Chorki: Building A Global Streaming Platform For Bangla-Speaking Audiences Anwhere From Bangladesh*, FUTURE STARTUP (Nov. 27, 2023), https://futurestartup.com/2023/11/27/chorki-building-a-global-streaming-platform-for-bangla-speaking-audiences-from-bangladesh/.

- 12. Defendants charge users to watch their pre-recorded videos on the browser and App. As of January 2024, a monthly subscription giving access to Chorki's pre-recorded video content cost users \$9.99 a month, and an annual subscription cost \$49.99.³
- 13. In the sign-up process, an individual must provide Defendants with their first name, last name, and e-mail address. Creating a Chorki account and signing up for a subscription payment plan grants a subscriber access to Defendants' exclusive pre-recorded video content.
- 14. Chorki is a subscription-based streaming platform that offers pre-recorded videos in the form of films and TV shows.⁴ Chorki is largely made up of Bangla-language content, with some foreign language series. International content is available in Bangla and other languages.
- 15. Chorki's Website and Apps are presented in English, and Chorki accepts payment in USD.
- 16. As of late 2023, Chorki already "amassed a staggering one million monthly active users, built a growing viewership from 194 countries, and ... experienced 100% year-on-year growth through its existence, doubling its revenue every year."⁵
- 17. Although Defendants do not publicize the total number of subscribers in the United States, there are significant indicia that Defendants direct their video service to subscribers in the United States. For example, Chorki has special subscription plans with unique discounts available to users in the United States.⁶

³ https://www.chorki.com/viewplans (last accessed Jan. 23, 2024).

⁴ See About Us, Chorki, https://www.chorki.com/about-us (last accessed Feb. 14, 2024).

⁵ Ruhul Kader, *Chorki: Building A Global Streaming Platform For Bangla-Speaking Audiences Anwhere From Bangladesh*, Future Startup (Nov. 27, 2023), https://futurestartup.com/2023/11/27/chorki-building-a-global-streaming-platform-for-bangla-speaking-audiences-from-bangladesh/.

⁶ See, e.g., Chorki, https://www.chorki.com/anandamela (last accessed Feb. 16, 2024).



- 18. Further, an independent digital data provider has reported that a monthly average of 1,300 downloads of the Chorki app occur solely from the Google Play store. This figure does not take into account visitors to the Chorki iOS App, the Website, or those who use the App on other streaming devices such as Roku.
- 19. On the Website, an independent digital data provider has reported that approximately 5.8% of unique Website visits originate from the United States.

III. DEFENDANTS KNOWINGLY DISCLOSE CONSUMERS' PERSONALLY IDENTIFIABLE INFORMATION TO THIRD PARTIES

- A. Testing Reveals That Defendants Illegally Share Users' PII With Third Parties Through Its Chorki App
- 20. In Winter 2023, Plaintiffs' counsel retained a private research company to review and conduct a dynamic analysis on the Chorki App. A "dynamic analysis" records the transmissions that occur from a user's device.

- 21. The private researchers tested what information (if any) Defendants disclose when a user logs into their Chorki account and watches a pre-recorded video on the App. The analysis revealed that Defendants disclose to third parties information sufficient to identify specific users and the exact videos they watch.
- 22. The analysis first established that Defendants incorporate multiple "application programming interfaces" ("APIs") into the App, either directly or contained inside a software development kit ("SDK").
- 23. APIs "enable[] companies to open up their applications' data and functionality to external third-party developers, business partners, and internal departments within their companies."
- 24. In addition to incorporating the Meta owned-and-operated Facebook SDK and Tracking Pixel into its App and Website respectively, Defendants integrate at least three other companies' SDKs into the App: CleverTap, Amazon Web Services, and Google Firebase, and further use Google Analytics' technological toolset to analyze its Website user data. Each third party receives information sufficient to identify specific users and the exact videos they watch.
- 25. As alleged in greater detail below, when consumers view videos on the Android version of the Chorki App, the following PII is disclosed to the following third parties:

THIRD PARTY	VIDEO INFO	PERSONAL INFO	OTHER INFO
Meta (Facebook)	Video ID, Video Title, Video Metadata, Video Play Event	Email, Full name	UserID, AAID
CleverTap	Video ID, Video Title, Time spent watching	Email Full name	UserID, IP address, Zip code

⁷ APPLICATION PROGRAMMING INTERFACE (API), IBM, https://www.ibm.com/cloud/learn/api (last accessed Sept 15, 2023).

26. As alleged in greater detail below, when consumers view videos on the iOS version of the Chorki App, the following PII is disclosed to the following third parties:

THIRD PARTY	VIDEO INFO	PERSONAL INFO	OTHER INFO
Meta (Facebook)	Video ID, Video Title, Video Metadata, Time spent watching	Email	UserID
App-Measurement (Google Firebase)	Video ID, Video Title	Email	UserID
ViewLift (AWS)**	Video ID, Video Title, Time spent watching	Email, Estimated: <i>IP address,</i> <i>Zip code</i>	UserID

^{**}Chorki partners with ViewLift to provide OTT content service

27. As alleged in greater detail below, when consumers view videos on the Chorki Website, the following PII is disclosed to the following third parties:

THIRD PARTY	VIDEO INFO	PERSONAL INFO	OTHER INFO
Meta (Facebook)	Video URL, Video Play Event	Full name Hashed: <i>Email</i> , <i>full</i> name, zip, city, state	fbp
Google Analytics	Video URL, Video Title, Video Play Event	Full name, Email	UserID, cid

28. Crucially, Defendants do not contest that these disclosures are occurring. On the contrary, Defendants admit in their Privacy Policy that they are knowingly and deliberately disclosing this information to the various third parties. For instance, Defendants admit in their Privacy Policy (i) that Defendants "may share your location with certain third-parties for analytics and advertising purposes," (ii) that Defendants and other "third-party advertisers and/or service providers [] may use a variety of technologies that automatically or passively collect information about how the [Chorki App and Chorki Website are] accessed and used" (*i.e.*, the videos consumers watch), and (iii) that "Chorki may automatically share your activity" with social media platforms,

"including the content you use and such information may be attributed to your account on the ... platform and published on such service."

- 1. Overview Of The CleverTap SDK
- 29. CleverTap brands itself as an "All-In-One engagement platform." CleverTap develops, owns, and operates the SDK of the same name.
- 30. Once integrated into a mobile application, the CleverTap API allows an app developer to, among other features, "[h]arness big-data to drive targeted customer engagement through automated segments, advanced analytics and actionable intelligence," and "[t]ailor customer interactions based on demographics, prior behavioral patterns, real-time actions and recommend next best experiences." 10
- 31. CleverTap's technology gives clients such as Defendants the capabilities they need to "[i]ngest, analyze and segment customer data" and engages users through various channels.
- 32. As part of CleverTap's suite of data capabilities, a client can "[h]arness granular data over an extended" period "with [the] TesseractDB" function before using CleverTap's rich data analytics kit to measure campaign impact. ¹¹ This, in turn, allows customers like Defendants to "[u]tilize analytics tools ... [to] [g]ain insights into user behavior and measure campaign impact for informed decision making." ¹²

⁸ PRIVACY POLICY, https://www.chorki.com/privacy-policy.

⁹ CLEVERTAP, https://clevertap.com/ (last accessed Oct. 16, 2023).

¹⁰ CRAFTING CUSTOMER LIFETIME EXPERIENCES, CLEVERTAP, https://clevertap.com/product-overview/ (last accessed Oct. 16, 2023).

CUSTOMER DATA ANALYTICS, CLEVERTAP, https://clevertap.com/customer-data-and-analytics/?utm_source=google&utm_campaign=NAM_EN_Search_Brand&utm_medium=ppc&utm_term=clevertap (last accessed Feb. 14, 2023).

¹² *Id*.

- 33. In addition to data tracking, analytics, and personalized marketing and advertising services, CleverTap also offers its clients user engagement services in various channels, such as Whatsapp, SMS, and in-app messaging.¹³ These channel-based services seek to help clients retain their users through personalized content offerings.
- 34. As alleged in greater detail below, Defendants utilize each and every one of these features and sends App users' PII to CleverTap through the CleverTap API in order to assist with Defendants' marketing, data analytics, and revenue generation.
- 35. Specifically, Defendants disclose to CleverTap via the CleverTap API a user's: (i) full name; (ii) e-mail address; (iii) user ID; (iv) estimated coordinates and city; (v) the name of the pre-recorded video watched by the user—either as the name of the TV series and TV show episode watched by the user, or the name of the movie watched by the user; and (vi) the video ID of the pre-recorded video watched by the user, in addition to other information.
- 36. The following excerpts from the dynamic analysis show the network traffic of Defendants disclosing this information to CleverTap:

¹³ CleverTap, https://clevertap.com/ (last accessed Feb. 14, 2023).

```
packet) com.prothomalo outbound to eu1.clevertap-prod.com:443
                       2600:9000:23cb:8000:1d:e2ad:55c0:93a1) encrypted at time Mon Dec 4
                      18:41:33.882 2023 (1701715293882) uuid
                      271a9f70-1d51-4cd5-a5b2-e71516f6c210_s5
                      POST /a1?os=Android&t=40502&z=R9Z-4W5-WK6Z&ts=1701715293 HTTP/1.1
                      Content-Type: application/json; charset=utf-8
                      X-CleverTap-Account-ID: R9Z-4W5-WK6Z
                                                                                     Geolocation in latitude and longitude
                      X-CleverTap-Token: 504-1c2
                      [{"g":"__dfa3187a811f481ea1dfa43569003ad2","type";"meta","af":{"Build":"187".
                       Version": "1.0.87", "OS Version": "12", "SDK
                      Version":40502, "Latitude":42.3667, "Longitude":-73.275, "Make": "Google", "Model"
                       : "AOSP on
                      Chorki
                                                                                                                  E-mail address
                  User ID
                      subscribed", "Identity": "3e9b6014-1c14-4132-a903-ab8d97da5e2e", "Re
Proof that
                                                                                                               Full name
                      Method": "viewlift", "Source": "android", "Name": "peppy
user watched
                      may", Carrier": "Mint", "cc": us",
"tz": "America\/New_York"}, "s":1701715237, "pg":2, "type": "profile", "ep":1701715
290, "f":true, "lsl":0, "dsync":true}, {"profile":{"location": "Lenox,
Massachusetts, United States", "Latitude and longitude": "42.3667, -73.275"
the video
                                                                                                                           Watched video's
                     {"evtName": "Watched", "evtData": {"subtitles": "N", "Platform": "android", "battime": 1, "rating": "NR", "Play Source": "Beyond Border_Show Detail", "Listened Time": 0, "Show name": "Weightlifting Fairy", "Content Title": "Weightlifting Fairy Episode 01", "Episode Number": "1", "Watched time": "1 Minutes", "watchPercentile": "1_minute", "Content Type
                                                                                                                          title and metadata
                      Detail": "movies", "Playback Type": "streamed", "Season Number": "1",
                                                                                                               Watched
                      Type":"Wifi", "Content Duration": "30.5 Minutes", "Content
                           "c63ff78e-655a-44de-9932-e51c24bd3050", "Conte
                                                                                                               video's ID
```

- 2. Overview Of The Amazon Web Services SDK
- 37. Defendants integrate the Amazon owned and operated Amazon Web Services SDK ("AWS" or "AWS SDK") ¹⁴ into the Chorki App through its primary partnership with Viewlift, an "[e]nd-to-end video platform" that powers live and video on demand streaming businesses. ¹⁵

 $^{^{14}}$ DOCUMENTATION, AWS https://docs.aws.amazon.com/?nc2=h_ql_doc_do (last accessed Jan. 30, 2024).

¹⁵ VIEWLIFT, https://viewlift.com/ (last accessed Jan. 30, 2024).



- 38. Viewlift "offer[s] customers the technology of their choice" by providing clients the option of using one or both of the AWS and Google Cloud technological platforms. ¹⁶ By choosing to integrate the AWS SDK through its Viewlift partnership, Defendants are enabled to "upload and manage all kinds of content, deliver it on branded apps across 16+ digital platforms[,] ... giv[e Defendants'] users a personalized experience[] and better understand what [users] want and how well you're doing." Thus, through Viewlift, Defendants can access AWS' wide-ranging collection of data analytics and marketing tools.
- 39. AWS is "the world's most comprehensive and broadly adopted cloud, offering over 200 fully featured services." AWS offers an array of technological solutions and products to help clients like Defendants better analyze, advertise, and market themselves and their products. ¹⁹

¹⁶ VIEWLIFT AND GOOGLE OPEN UP THE CLOUD FOR OTT: PLATFORM TO OFFER MULTIPLE CLOUD PROVIDERS, PR NEWSWIRE, https://www.prnewswire.com/news-releases/viewlift-and-google-open-up-the-cloud-for-ott-platform-to-offer-multiple-cloud-providers-301740613.html (Feb. 7, 2023 at 8 ET).

¹⁷ VIDEO PLATFORM, VIEWLIFT, https://viewlift.com/video-platform/ (last accessed Jan. 30, 2024).

¹⁸ What is AWS, AWS, https://aws.amazon.com/what-is-aws/?nc1=f_cc (last accessed Jan. 30, 2024).

¹⁹ See AWS CLOUD PRODUCTS, AWS, https://aws.amazon.com/products/?pg=WIAWS-N&tile=learn_more&aws-products-all.sort-by=item.additionalFields.productNameLowercase &aws-products-all.sort-order=asc&awsf.re%3AInvent=*all&awsf.Free%20Tier%20Type= *all&awsf.tech-category=*all&awsm.page-aws-products-all=1 (last accessed Jan. 30, 2024).

These tools include "[a]dvanced analytics," "[d]ata visualization," "[p]urpose-built databases," and "[p]redictive analytics."²⁰

- 40. These tools also include APIs, such as the "AWS Amplify," which allows developers to "[b]uild, deploy, host, and manage scalable web and mobile apps," and "AWS CloudTrail," which allows developers to "[t]rack user activity and API usage on AWS;" as well as other Amazon 'services' such as "AWS Elemental MediaTailor," which delivers "a seamless, TV-like viewing experience without buffering" and can "[b]oost audience engagement" and "[o]ptimize monetization opportunities with personalized ads."
- 41. Specifically, Defendants disclose to AWS via the AWS SDK a user's: (i) e-mail address; (ii) user ID; (iii) estimated zip code and IP address; (iv) the name and Universal Resource Locator ("URL") of the pre-recorded video watched by the user; and (v) the video ID of the pre-recorded video watched by the user, in addition to other information. The following excerpt from the dynamic analysis shows Defendants disclosing this information to AWS via the AWS SDK:

²⁰ AWS MARKETPLACE, AWS, https://aws.amazon.com/marketplace/solutions/data-analytics/?nc2=h ql mp sol da (last accessed Jan. 30, 2024).

²¹ AWS CLOUDTRAIL, AWS, https://aws.amazon.com/cloudtrail/?did=ap_card&trk=ap_card (last accessed Jan. 30, 2024).

AWS ELEMENTAL MEDIATAILOR, AWS, https://aws.amazon.com/mediatailor/?did=ap card&trk=ap card (last accessed Jan. 30, 2024).



- 3. Overview of the Google Firebase SDK
- 42. Defendants integrate the Google Firebase SDK into the iOS App ("Firebase" or "Firebase SDK"). The Firebase SDK is owned and operated by Firebase, Inc., which is Google's mobile development platform.²³
- 43. As an "app development platform that helps [customers like Defendants] build and grow apps," Firebase includes many technological tools that Firebase offers to clients like Defendants. These tools allow clients like Defendants to "[e]ngage end users ... using custom notifications," "[m]onetize an app ... [and i]ncrease revenue by personalizing user experience," and "[t]est and rollout features ... [to e]nsure stable and delightful features before launch."
- 44. For example, Firebase Performance Monitoring is a real-time performance monitoring tool that helps clients like Defendants "keep a close eye on" their apps and "control ...

²³ See FIREBASE & GOOGLE CLOUD, FIREBASE, https://firebase.google.com/firebase-and-gcp (last accessed Feb. 12, 2024); see also UNDERSTAND FIREBASE PROJECTS, FIREBASE, https://firebase.google.com/docs/projects/learn-more (last accessed Jan. 31, 2024).

²⁴ FIREBASE, GOOGLE.COM, https://firebase.google.com/ (last accessed Jan. 31, 2024).

²⁵ See generally, APP DEVELOPMENT SOLUTIONS, FIREBASE, https://firebase.google.com/solutions (last accessed Jan. 31, 2024).

²⁶ SOLUTIONS, FIREBASE, https://firebase.google.com/solutions (last accessed Jan. 31, 2021).

performance data with a customizable dashboard that makes it easy to focus on [Defendants'] most important metrics." ²⁷ Defendants can use the Performance Monitoring SDK to "collect performance data from" an app, "then review and analyze that data in the Firebase console." ²⁸

- 45. Firebase also provides tools that can "[a]utomatically measure app startup time" and "several [other] critical aspects of performance." For example, the Firebase SDK logs "startup time, rendering data by screen, and activity while in the foreground or background."²⁹
- 46. "At the heart of Firebase is Google Analytics, an unlimited analytics solution." Analytics integrates across Firebase features and provides you with unlimited reporting for up to 500 distinct events³¹ that you can define using the Firebase SDK." The analytics reports Google Analytics provides help customers like Defendants "understand clearly how [their] users behave, which enables [them] to make informed decisions regarding app marketing and performance optimizations." 33

²⁷ FIREBASE PERFORMANCE MONITORING, FIREBASE, https://firebase.google.com/products/performance (last accessed Jan. 31, 2021).

²⁸ FIREBASE PERFORMANCE MONITORING DOCS, FIREBASE, https://firebase.google.com/docs/perfmon (last accessed Jan. 31, 2021).

²⁹ FIREBASE PERFORMANCE MONITORING DOCS, FIREBASE, https://firebase.google.com/docs/perfmon (last accessed Jan. 31, 2024).

³⁰ GOOGLE ANALYTICS, FIREBASE, https://firebase.google.com/docs/analytics (last accessed Jan. 31, 2021).

³¹ An event captures "[w]hat is happening in [an] app, such as user actions, system events, or errors." Get Started With Google Analytics, Firebase, https://firebase.google.com/docs/analytics/get-started?platform=ios (last accessed Jan. 31, 2021).

³² GOOGLE ANALYTICS, FIREBASE, https://firebase.google.com/docs/analytics (last accessed Jan. 31, 2021).

³³ GOOGLE ANALYTICS, FIREBASE, https://firebase.google.com/docs/analytics (last accessed Jan. 31, 2021).

- 47. The Google Analytics "SDK automatically captures a number of events," such as "when a user engages the app," when a watched video "progresses past 10%, 25%, 50%, and 75% duration time," when a "video starts playing," and "when a user clicks an ad." Google Analytics also automatically captures "user properties," such as the user's city where the activity originated, the gender and age of the user, and the "interests of the user (such as Arts & Entertainment, Games, Sports)." Sports)."
- 48. The Google Analytics SDK "also allows [Defendants] to define [their] own custom events to measure the things that uniquely matter to [their] business." Some examples that Firebase provides as reference include when a user "sees an advertisement," "signs up for an account on" an app, and "shares content from" an app.³⁷
- 49. The Google Analytics SDK also allows customers like Defendants to define and track custom user properties. "These can be used to define audiences for [an] app." Audiences allow customers like Defendants to "segment" users "in ways that are important" to a distinct

ANALYTICS HELP, FIREBASE, https://support.google.com/analytics/answer/9234069?visit_id=638423312398871494-3486140385&rd=2 (last accessed Jan. 31, 2021).

³⁵ See Predefined User Dimensions, Firebase, https://support.google.com/analytics/answer/9268042?visit_id=638423312402124144-820793580&rd=2 (last accessed Jan. 31, 2021).

³⁶ GOOGLE ANALYTICS, FIREBASE, https://firebase.google.com/docs/analytics (last accessed Jan. 31, 2021).

 $^{^{37}}$ RECOMMENDED EVENTS, FIREBASE, https://support.google.com/analytics/answer/9267735 (last accessed Jan. 31, 2024).

³⁸ SET USER PROPERTIES, FIREBASE, https://firebase.google.com/docs/analytics/user-properties?platform=ios (last accessed Jan. 31, 2024).

business.³⁹ For example, an audience could be segmented by "event," by "user property, or a combination of "events, parameters, and properties to include practically any subset of users."⁴⁰

- 50. All of these automatically collected events and user properties, as well as custom events and user properties, can be seen in the overview report on the Google Analytics SDK's "Dashboard." This report summarizes data important to a customer's business to help "monitor engagement," "see how much revenue" is being generated, and "evaluate the success of ... app releases." 42
- 51. As can be seen in the below excerpted dynamic analysis, Defendants disclose to Firebase via the Google Firebase SDK an iOS user's: (i) e-mail address; (ii) user ID; and (iii) the full title of the video watched:

 E-mail address

³⁹ CREATE, EDIT, AND ARCHIVE AUDIENCES, FIREBASE, https://support.google.com/firebase/answer/6317509#zippy=%2Cin-this-article (last accessed Jan. 31, 2024).

⁴⁰ CREATE, EDIT, AND ARCHIVE AUDIENCES, FIREBASE, https://support.google.com/firebase/answer/6317509#zippy=%2Cin-this-article (last accessed Jan. 31, 2024).

FIREBASE OVERVIEW REPORT, FIREBASE, https://support.google.com/analytics/answer/11014767 (last accessed Jan. 31, 2024).

FIREBASE OVERVIEW REPORT, FIREBASE, https://support.google.com/analytics/answer/11014767 (last accessed Jan. 31, 2024).

- 4. Overview of the Facebook SDK
- 52. Defendants integrate the Facebook SDK into their App. The Facebook SDK is owned and operated by Meta.⁴³ "[B]y using the Facebook SDK for [iOS and Android]," clients like Defendants can use "Facebook to build engaging social apps."⁴⁴
- 53. Meta (formerly known as Facebook) describes itself as a "real identity platform,"⁴⁵ and is the largest social networking site on the planet, touting 2.9 billion monthly active users in 2021,⁴⁶ and reaching more than 3 billion monthly active users by the end of 2023.⁴⁷
- 54. Meta users are allowed only one account and must share "the name they go by in everyday life."⁴⁸ To that end, when creating an account, users must provide their first and last name, along with their birthday and gender.⁴⁹

⁴³ See, e.g., FACEBOOK SDK FOR ANDROID, META FOR DEVELOPERS, https://developers.facebook.com/docs/android/ (last accessed Feb. 12, 2024); Facebook SDK for iOS, Meta for Developers, https://developers.facebook.com/docs/ios/ (last accessed Feb. 12, 2024).

⁴⁴ FACEBOOK SDK FOR ANDROID, META FOR DEVELOPERS, https://developers.facebook.com/docs/android/ (last accessed Feb. 12, 2024); *see also* Facebook SDK for iOS, Meta for Developers, https://developers.facebook.com/docs/ios/ (last accessed Feb. 12, 2024).

⁴⁵ Sam Schechner and Jeff Horwitz, *How Many Users Does Facebook Have? The Company Struggles to Figure It Out*, WALL. St. J. (Oct. 21, 2021), https://www.wsj.com/articles/how-many-users-does-facebook-have-the-company-struggles-to-figure-it-out-11634846701.

⁴⁶ Sean Burch, *Facebook Climbs to 2.9 Billion Users, Report 29.1 Billion in Q2 Sales*, YAHOO (July 28, 2021), https://www.yahoo.com/now/facebook-climbs-2-9-billion-202044267.html.

⁴⁷ NUMBER OF MONTHLY ACTIVE FACEBOOK USERS WORLDWIDE AS OF 4TH QUARTER 2023, STATISTA, https://www.statista.com/statistics/264810/number-of-monthly-active-facebook-users-worldwide/ (last accessed Feb. 14, 2023).

⁴⁸ COMMUNITY STANDARDS, PART IV INTEGRITY AND AUTHENTICITY, META, https://www.facebook.com/communitystandards/integrity_authenticity.

⁴⁹ SIGN UP, META, https://www.facebook.com/.

- 55. Meta generates revenue by selling advertising space on its website.⁵⁰ In 2022, Meta generated \$134.9 billion in revenue.⁵¹ Roughly \$131.9 billion of that, or 97.7%, came from selling advertising space.⁵²
- 56. Meta sells advertising space by highlighting its ability to target users.⁵³ Meta can target users so effectively because it surveils user activity both on and off its site.⁵⁴ This allows Meta to make inferences about users beyond what they explicitly disclose, like their "interests," "behavior," and "connections."⁵⁵
- 57. Once installed onto a mobile application, the Facebook SDK's "Meta App Events [program] allows [Defendants'] app or web page to track events, such as a person installing [the] app or completing a purchase." 56
- 58. Defendants can control what user actions—or, as Meta calls it, "events"—the Facebook SDK will collect. "After you integrate the Facebook SDK, certain App Events are

⁵⁰ Mike Isaac, Facebook's profit surges 101 percent on strong ad sales., N.Y. TIMES (July 28, 2021), https://www.nytimes.com/2021/07/28/business/facebook-q2-earnings.html.

⁵¹ META REPORTS FOURTH QUARTER AND FULL YEAR 2022 RESULTS, META, https://investor.fb.com/investor-news/press-release-details/2024/Meta-Reports-Fourth-Quarter-and-Full-Year-2023-Results-Initiates-Quarterly-Dividend/default.aspx (last accessed Feb. 14, 2024).

⁵² See id.

WHY ADVERTISE ON META, META, https://www.facebook.com/business/help/205029060038706 (last accessed Oct. 20, 2023).

⁵⁴ ABOUT META PIXEL, META, https://www.facebook.com/business/help/742478679120153?id=1205376682832142 (last accessed Oct. 20, 2023).

⁵⁵ AD TARGETING: HELP YOUR ADS FIND THE PEOPLE WHO WILL LOVE YOUR BUSINESS, META, https://www.facebook.com/business/ads/ad-targeting (last accessed Oct. 20, 2023).

⁵⁶ META APP EVENT TRACKING, META, https://developers.facebook.com/docs/app-events/ (last accessed Jan. 29, 2024).

automatically logged and collected."⁵⁷ This includes "[a]pp [i]nstall[ments]," [a]pp [l]aunch[es]," and "[i]n-[a]pp [p]urchase[s]."⁵⁸ "By tracking these events," Defendants "can measure ad performance and build audiences for ad targeting."⁵⁹

- 59. Meta also offers a menu of "standard events" from which advertisers like Defendants can choose to track. These standard events include tracking when a user adds to cart, adds to wishlist, adds payment info, and views content on any page.⁶⁰
- 60. And if those standard options do not cover the full spectrum of a client's desired tracking events, Meta allows Defendants to manually create their own events to track.⁶¹ With the Facebook SDK, Defendants can even "measure app events from iOS 14.5+ users who have opted out of app tracking."⁶²
- 61. Through the Facebook SDK, Defendants disclose App users' e-mail addresses, first and last names, User IDs, and video-viewing information in the form of video title and website URL to Meta.

⁵⁷ META FOR DEVELOPERS, META, https://developers.facebook.com/docs/app-events/getting-started-app-events-android (last accessed Jan. 29, 2024). This is true unless Defendants disable automatic event logging.

GETTING **STARTED** WITH APP **EVENTS** (ANDROID), META, https:// developers.facebook.com/docs/app-events/getting-started-app-events-android (last accessed Jan. 2024); also AUTOMATIC APP **EVENT** LOGGING, https:// META, developers.facebook.com/docs/app-events/automatic-event-collection-detail (last accessed Jan. 29, 2024).

⁵⁹ OVERVIEW, META, https://developers.facebook.com/docs/app-events/overview/ (last accessed Jan. 29, 2024).

⁶⁰ See FACEBOOK APP EVENTS REFERENCE, META, https://developers.facebook.com/docs/app-events/reference (last accessed Jan. 29, 2024).

⁶¹ See GET STARTED WITH APP EVENTS (ANDROID), META, https://developers.facebook.com/docs/app-events/getting-started-app-events-android (last accessed Jan. 29, 2024).

⁶² AGGREGATED EVENT MEASURE, META, https://developers.facebook.com/docs/app-events/guides/aggregated-event-measurement (last accessed Jan. 29, 2024).

- 5. Defendants Disclose Android App Users' Names And E-Mail Addresses To Meta And CleverTap
- 62. *Meta.* The dynamic analysis demonstrated that Defendants were sharing Android users' names and e-mail addresses to Meta via the Facebook SDK.
- 63. A person's first and last name undoubtedly constitute personally identifying information.
- 64. An email address is a unique string of characters which designate an electronic mailbox. As industry leaders, 63 trade groups, 64 and courts 65 agree, an ordinary person can use an email address to uniquely identify another individual. Indeed, multiple services exist to enable anyone with internet access and a credit card to look up who owns a particular email address.
- 65. The following excerpt from the dynamic analysis shows Defendants disclosing a user's first name, last name, and e-mail address to Meta when a user watches a pre-recorded video on the Chorki Android App:

```
c0895", "User+Id": "3e9b6014-1c14-4132-a903-ab8d97da5e2e", "Email": "peppy may@yahoo.com", "Transaction+Amount": "0.0", "Subscription+Start+Date": "2
```

"Name": "peppy+may"

⁶³ Allison Schiff, *Can Email Be The Next Big Online Identifier?*, AD EXCHANGER (Aug. 25, 2020), https://www.adexchanger.com/data-exchanges/can-email-be-the-next-big-online-identifier/ (quoting Tom Kershaw, CTO of Magnite, who said "[a]n email address is universally considered to be PII, so as such it can never be a valid identifier for online advertising").

⁶⁴ NETWORK ADVERTISING INITIATIVE, NAI CODE OF CONDUCT 19 (2020), https://thenai.org/wp-content/uploads/2021/07/nai code2020.pdf (identifying email as PII).

⁶⁵ See United States v. Hastie, 854 F.3d 1298, 1303 (11th Cir. 2017) ("Email addresses fall within the ordinary meaning of information that identifies an individual. They can prove or establish the identity of an individual.").

- 66. *CleverTap.* As the dynamic analysis establishes, when a user watches a prerecorded video on the App, Defendants disclose users' full names and e-mail addresses to CleverTap via the CleverTap API.
- 67. The following image is an excerpt of the data sent from the Android version of the App to CleverTap, as captured by the dynamic analysis. The excerpt shows Defendant disclosing a user's full name and e-mail address to CleverTap when a user watches a pre-recorded video:

```
"imp":0,"tlc":[]},{"profile":{"MSG-whatsapp":false,"Email":"peppymay@yahoo.co
m","Amount":0,"Free Trial":"No","Discount Amount":0,"User Status":"Never

Method":"viewlift","Source":"android","Name":"peppy
may","Carrier":"Mint","cc":"us",
```

- 6. Defendants Disclose iOS App Users' E-Mail Addresses To Google Firebase, AWS, And Meta
- 68. As established above, a person's e-mail address undoubtedly constitutes personally identifying information.
- 69. *Google Firebase.* The dynamic analysis captured Defendants disclosing a user's e-mail address to Google Firebase via the Firebase SDK when a user watches a pre-recorded video on the iOS version of the App. This can be seen from the excerpted dynamic analysis below:

```
.EmailId..prairie837@gmail.com.
```

70. **AWS.** Plaintiffs' counsel captured Defendants disclosing a user's e-mail address to AWS when a user watches a pre-recorded video on the iOS version of the App. The following excerpt is demonstrative:

```
"email":"prairie837@gmail.com","
```

71. *Meta.* The dynamic analysis captured Defendants disclosing a user's e-mail address to Meta when a user watches a pre-recorded video on the iOS version of the App. The following excerpt from the dynamic analysis is demonstrative:

```
Rahmaan', '_logTime':1701713239, 'subtitles':'Y', 'platform':'iOS', 'email':'prairie837@gmail.com', 'networkType':'Wifi', 'contentType':'Video', 'b
```

- 7. Defendants Disclose App Users' User IDs To Meta, CleverTap, Google Firebase, And AWS
- 72. A user ID is a unique string of numbers which Defendants assign to an individual user after a user creates a Chorki account. The unique user IDs allow Defendants to identify and track an individual user.
- 73. The dynamic analysis captured Defendants disclosing the same Android App user's unique ID ("3e9b6014-1c14-4132-a903-ab8d97da5e2e") to both Meta and CleverTap. This unique user ID was assigned to the same Android user's name and e-mail address, making it apparent that Defendants assign a unique Chorki user ID to each user once an individual user creates their own Chorki account.

"User+Id": "3e9b6014-1c14-4132-a903-ab8d97da5e2e",

,"Identity":"3e9b6014-1c14-4132-a903-ab8d97da5e2e

Disclosure of Chorki user ID to Meta

Disclosure of Chorki user ID to CleverTap

- 74. The dynamic analysis also captured Defendants disclosing the same iOS App user's unique ID ("deacddb6-b847-4d94-848c-1d742a6ebc7e") to AWS, Firebase, and Meta. This unique user ID was assigned to the same Android user's name and e-mail address, making it apparent that Defendants assign a unique Chorki user ID to each user once an individual user creates their own Chorki account.
- 75. The following excerpted dynamic analysis shows Defendants disclosing a user's unique ID to AWS:

```
":"dd078ff5-b16e-45e4-9723-501b56b9df0a","userId":"deacddb6-b847-4d94-
848c-1d742a6ebc7e"}
```

76. And disclosing the exact same Chorki user ID to Firebase via the Firebase SDK:

```
id.$deacddb6-b847-4d94-848c-1d742a6ebc7e.
```

77. And to Meta via the Facebook SDK:

```
Analyst', '_eventName': 'watched', 'watchPercentile': '2_minutes', 'userId': 'deacddb6-b847-4d94-848c-1d742a6ebc7e'}]", 'format': "json', 'extinfo': "
```

- 78. This evidence also indicates that Defendants disclose a user's unique Chorki account ID along with other personally identifying information, such as name and e-mail address, to assist in third parties' marketing, advertising, and analysis of Defendant's user data.
 - 8. Defendants Disclose Information Identifying Which Specific Videos Were Watched By Which Android App Users To Meta and CleverTap
- 79. When Defendants transmit a user's identifiers, they also transmit information sufficient to identify which specific video was watched by the user, such as the video title and video ID.
- 80. *Meta*. Defendants disclose to Meta via the Meta API the full name and video ID of the video a user viewed on the Android App. For example, the following excerpt shows the traffic captured by the dynamic analysis of an Android App user. The video title the user watched is "Something Like An Autobiography." The video ID of the video is "a9e43eb-3e1f-45d-a261-c141e59e2b3f."

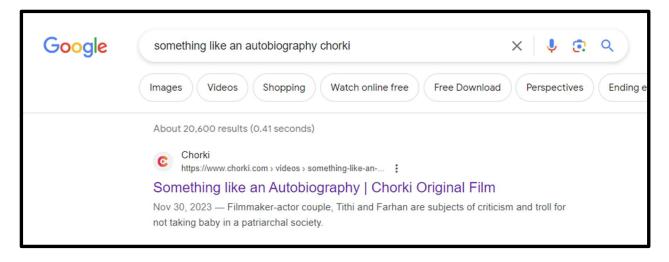
```
,+Sharaf+Ahmed+Jibon,+Monowar+Hossain+Dipjol", "contentTitle": "Somethin
g+like+an+Autobiography+", "networkType": "Wifi", "contentType": "VIDEO", "
playbackType": "Streamed", "platform": "Android"}, ...]&event=CUSTOM_APP_E

I+rarook1 , playsource : null_video+betal1 , contentburation : 84+Minu
tes", "contentId": "a9e43eb7-3e1f-45fd-a261-c141e59e2b3f", "actorName":
```

81. As shown above, Defendants disclose to Meta the Chorki video ID of the video an individual user watches—"a9e43eb-3e1f-45d-a261-c141e59e2b3f." This identification number

correlates to the video a user watches and allows Defendants and Meta to further categorize the exact video a user watches into the user's PII, then use that information in Defendants' marketing, analytics, and advertising.

- 82. Given the fact that every video on Chorki's streaming service has a corresponding video ID, Defendants provide Meta with backend tools to match a video's unique ID to a video's title so that Meta can help Defendants enhance their marketing and advertising efforts.
- 83. Further, disclosing a video's full title allows even an ordinary person to easily locate the watched video. For example, in the screenshot below the disclosed video title was searched on a search engine in conjunction with "Chorki"—and the first result on Google was the video that the user watched.



84. *CleverTap*. Defendants disclose to CleverTap via the CleverTap API the full video name, video ID, season, and episode information of a video that a user watches on the Android version of the App. The following image is an excerpt of the traffic captured by the Android dynamic analysis showing the disclosure of these video identifiers by Defendants to CleverTap:

Watched video's title and metadata

```
{"evtName":"Watched", "evtData":{"subtitles":"N", "Platform":"android", "buffer_
time":1, "rating":"NR", "Play Source":"Beyond Border_Show Detail", "Listened
Time":0, "Show name":"Weightlifting Fairy", "Content Title":"Weightlifting
Fairy Episode 01", "Episode Number":"1", "Watched time":"1
Minutes", "watchPercentile":"1_minute", "Content Type
Detail":"movies", "Playback Type":"streamed", "Season Number":"1", "Network
Type":"Wifi", "Content Duration":"30.5 Minutes", "Content
ID":"c63ff78e-655a-44de-9932-e51c24bd3050", "Content
Watched video's ID
```

- 9. Defendants Disclose Information Identifying Which Specific Videos Were Watched By Which Specific iOS App Users To Meta, Firebase, and AWS
- 85. In the dynamic analysis of Defendants' iOS App, Plaintiffs' counsel obtained evidence that Defendants are transmitting the video-watching information of iOS App users to Meta, Firebase, and AWS.
- 86. *Meta.* Specifically, Defendants transmit to Meta the video titles and video ID that an iOS App user watches. For example, displayed below is an excerpt of the dynamic analysis showing Defendant disclosing to Meta the full video title and video ID that an iOS App user watched:

```
ufferTime':0, 'contentId':'f6a95283-9a03-47cd-9715-7385abc5bb9e', 'contentDuration':4596, 'bufferCount':0, 'contentTitle':'Long Period of Persecution', 'playbackType':'Streamed', 'actorName':'... Mia Seppo, UN
```

- 87. As stated above, the disclosed video title, when searched with "Chorki," sufficiently allows an ordinary person to locate the exact video that a user watched with ease.
- 88. *Google Firebase.* Defendants transmit to Google Firebase via the Firebase API the video title of a video that an iOS App user watched. The following excerpt is demonstrative:

```
.....pageName.&Player Screen - On the Road of Courage. page_view.....1
```

89. **AWS.** As shown below highlighted in yellow, Defendants disclose to AWS the full video title and Uniform Resource Locator ("URL") of the video a user watches on the iOS Chorki App:

```
1d742a6ebc7e", "url": "https://www.chorki.com/films/title/On the Road of Courage", "vid": "31818a63-dc8b-4aac-92c7-81f902d99e5b", "vpos": "30"}]
```

90. Although the name of the video is disclosed as a URL, this information nonetheless indicates that a user has watched the specific video named in the URL. The aforementioned watched video appears on a webpage as the only video responsive to the title in the URL.



- 91. A video's title is the most direct way for a third party to understand a specific user's video-viewing information. Indeed, with this information, even an ordinary person is able to identify the exact video a specific user watches.
- 92. Defendants own and operate both the Android and iOS versions of the Chorki App. Meta, Firebase, and AWS use the same or similar backend tools that Defendants provide Meta and CleverTap for use in the Android version of the App to match a video's unique ID to a video's title

so that these iOS third parties can help Defendants enhance its marketing and advertising efforts in the iOS version of the App.

B. Testing Reveals That Defendants Illegally Share Users' PII With Third Parties Through The Chorki Website

- 93. The dynamic analysis also established that Defendants partner with at least two third party data analytics and services providers on the Chorki website ("Chorki.com" or "Website") to build its online user base: Meta and Google Analytics.
 - 1. Overview Of Google Analytics
 - 94. Defendants integrate Google Analytics into its Website.
- 95. Google Analytics is part of the Google Marketing Platform, which is owned and operated by Google.⁶⁶ Google currently offers an upgraded version of Google Analytics, called Google Analytics 360, and is prepared to release an even more powerful version with Google Analytics 4.⁶⁷ But the functions key to Defendants' purposes remain constant, if enhanced, throughout all versions of the Analytics platform.
- 96. The Google Analytics platform ("Analytics") lets clients like Defendants "measure user interactions with [their] business across various devices and environments." Analytics "[u]nlock[s] customer-centric measurement" for Defendants and "anticipates future [user] actions with Google's machine learning to get more value out of" Defendants' user data. 69

⁶⁶ GOOGLE MARKETING PLATFORM, https://marketingplatform.google.com/about/enterprise/#?modal_active=none (last accessed Feb. 13, 2024).

⁶⁷ What's the Difference? Google Analytics vs. Google Analytics 360, Channelmix (Sept. 13, 2022), https://channelmix.com/blog/ga-vs-ga360/.

⁶⁸ INTEGRATING WITH GOOGLE ANALYTICS, GOOGLE ANALYTICS, https://cloud.google.com/appengine/docs/standard/integrating-with-analytics?tab=python (last accessed Feb. 13, 2024).

⁶⁹ ABOUT, ANALYTICS 360, https://marketingplatform.google.com/about/analytics-360/ (last accessed Feb. 13, 2024).

- 97. Google Analytics works by adding "a small piece of JavaScript measurement code to each page on" a client's website.⁷⁰ Every time a user visits a webpage, the tracking code, called the Google tag, ⁷¹ will collect "information about how that user interacted with the page." Commonly collected information includes "how many users visited a page," "how many users bought an item," and the "language setting, type of browser (such as Chrome or Safari), and the device and operating system on which the browser is running."
- 98. "When the measurement code [on a website] collects data, it ... sends it to Google Analytics to be processed into reports." As a basic function, Analytics automatically collects and organizes the data, 5 but clients like Defendants can also "customize how that data is processed."

⁷⁰ How Google Analytics works, Google Analytics, https://support.google.com/analytics/answer/12159447?hl=en&ref_topic=14089939&sjid=9539582890015299466-NC (last accessed Feb. 13, 2024).

THE GOOGLE TAG AND TAG MANAGER, GOOGLE ANALYTICS, https://developers.google.com/analytics/devguides/collection/ga4/tag-options (last accessed Feb. 13, 2024); *see also* Set up data collection for websites, Google Analytics, https://support.google.com/analytics/answer/9304153#add-tag&zippy=%2Cadd-the-google-tag-directly-to-your-web-pages (last accessed Feb. 13, 2024).

⁷² *Id*.

⁷³ *Id*.

⁷⁴ *Id*.

NALYTICS DIMENSIONS AND METRICS, GOOGLE ANALYTICS, https://support.google.com/analytics/answer/9143382?hl=en&ref_topic=12153537,12153943,29 86333,&sjid=9539582890015299466-NC&visit_id=638434476336966725-1891243554&rd=1 #zippy=%2Cattribution%2Cdemographics%2Cecommerce%2Cevent%2Cgaming%2Cgeneral% 2Cgeography%2Clink%2Cpage-screen%2Cplatform-device%2Cpublisher%2Ctime%2Ctraffic-source%2Cuser%2Cuser-lifetime%2Cvideo%2Cadvertising%2Cpredictive%2Crevenue%2 Csearch-console%2Csession (last accessed Feb. 13, 2024).

⁷⁶ *Id*.

- 99. The Google tag automatically collects certain events such as when a "user engages the" website, and when a "video starts playing." Defendants can also configure the Google tag to collect custom events—some of Google's recommended custom events include when a user logs in, "submits their payment information during checkout" and "selects content on [a] website."
- 100. The organized data is ultimately "compiled into Analytics reports, which [Defendants] can use to perform in-depth analysis to better understand [their] customers." This, in turn, assists Defendants in their marketing, advertising, and analytics goals.
- 101. Specifically, Defendants disclose to Google Analytics the Website user's: (i) full name; (ii) e-mail address; (iii) user ID and cid values; (iv) the full title of a watched video; and (v) the URL of a watched video. This can be seen in the following excerpts from the dynamic analysis:



⁷⁷ AUTOMATICALLY COLLECTED EVENTS, GOOGLE ANALYTICS, https://support.google.com/analytics/answer/9234069 (last accessed Feb. 13, 2024).

⁷⁸ RECOMMENDED EVENTS, GOOGLE ANALYTICS, https://support.google.com/analytics/answer/9267735 (last accessed Feb. 13, 2024).

⁷⁹ THE VALUE OF DIGITAL ANALYTICS, GOOGLE ANALYTICS, https://support.google.com/analytics/answer/12159453?hl=en&sjid=9539582890015299466-NC&visit_id=638434476336966725-1891243554&rd=2&ref_topic=14089939 (last accessed Feb. 13, 2024).



- 2. Overview Of The Meta Tracking Pixel
- 102. Defendants integrate the Meta Tracking Pixel into their Website. The Meta Tracking Pixel is a piece of code that clients, like Defendants, can integrate into their website. Once activated, the Meta Tracking Pixel "tracks the people and type of actions they take." ⁸⁰
- 103. When the Meta Tracking Pixel captures an action, it sends a record to Meta. Once this record is received, Meta processes it, analyzes it, and assimilates it into datasets like Custom Audiences and Core Audiences.
- Audiences enable advertisers to reach "people who have already shown interest in [their] business, whether they're loyal customers or people who have used [their] app or visited [their] website." With Custom Audiences, advertisers can target existing customers directly, and can also build "Lookalike Audiences," which "leverages information such as demographics, interests, and behavior from your source audience to find new people who share similar qualities." 82

⁸⁰ RETARGETING, META, https://www.facebook.com/business/goals/retargeting (last accessed Oct. 20, 2023).

⁸¹ ABOUT CUSTOM AUDIENCES, META, https://www.facebook.com/business/help/744354708981227?id=2469097953376494 (last accessed Oct. 20, 2023).

⁸² ABOUT LOOKALIKE AUDIENCES, META, https://www.facebook.com/business/help/164749007013531?id=401668390442328 (last accessed Oct. 20, 2023).

- 105. Unlike Core Audiences, Custom Audiences require an advertiser to supply the underlying data to Meta. Advertisers can do this through two mechanisms: (i) by manually uploading contact information for customers; or (ii) by utilizing Meta's "Business Tools," which collect and transmit the data automatically.⁸³ One such Business Tool is the Meta Tracking Pixel.
- Tracking Pixel will collect. The Meta Tracking Pixel can capture the website's metadata, along with what pages a visitor views and what buttons a visitor clicks. ⁸⁴ Defendants can also configure the Meta Tracking Pixel to track other events. Meta offers a menu of "standard events" from which advertisers like Defendants can choose, including what content a visitor views or purchases. ⁸⁵ Chorki can also create its own tracking parameters by building a "custom event." ⁸⁶
- 107. Website developers like Defendants control how the Meta Tracking Pixel identifies Website visitors. The Meta Tracking Pixel is configured to automatically collect "HTTP Headers" and "Pixel-specific Data." HTTP Headers collect "IP addresses, information about the web

⁸³ CREATE A CUSTOMER LIST CUSTOM AUDIENCE, Meta, https://www.facebook.com/business/help/170456843145568?id=2469097953376494 (last accessed Oct. 20, 2023).

⁸⁴ See Meta Pixel, Accurate Event Tracking, Advanced, Meta, https://developers.facebook.com/docs/facebook-pixel/advanced/ (last accessed Oct. 20, 2023); see also BEST PRACTICES FOR META PIXEL SETUP, META, https://www.facebook.com/business/help/218844828315224?id=12053 76682832142 (last accessed Oct. 20, 2023).

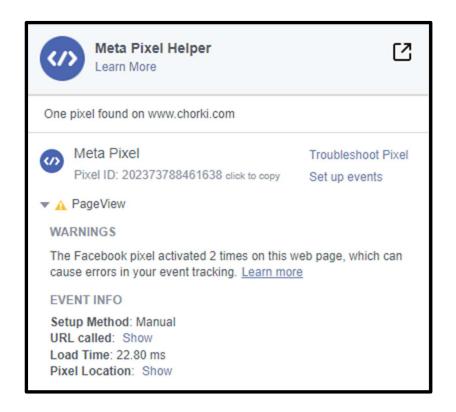
SPECIFICATIONS FOR FACEBOOK PIXEL STANDARD EVENTS, META, https://www.facebook.com/business/help/402791146561655?id=1205376682832142 (last accessed Oct. 20, 2023).

⁸⁶ ABOUT STANDARD AND CUSTOM WEBSITE EVENTS, META https://www.facebook.com/business/help/964258670337005?id=1205376682832142 (last accessed Oct. 20, 2023).

⁸⁷ META PIXEL, META, https://developers.facebook.com/docs/facebook-pixel/ (last accessed Oct. 20, 2023).

browser, page location, document, referrer and persons using the website."88 Pixel-specific Data includes "the Pixel ID and cookie."89

108. As can be seen below, Defendants host the Meta Tracking Pixel on their website and transmit distinct events to Meta.



109. Through the Meta Tracking Pixel, Defendants disclose a Website user's: (i) unhashed full name; (ii) hashed e-mail address; (iii) hashed full name; (iv) Meta IDs, last names, phone numbers, and video-viewing information in the form of video title and website URL.

```
LLO,\nBEE KHOURY\nBee Khoury\nWatchlist\nHistory\n
Settings\nActivate TV\nLOG OUT", "numChildButtons":6, "tag"
:"div", "type":null}&cd[buttonText]=HELLO, BEE KHOURY Bee Khoury
```

⁸⁸ *Id*.

⁸⁹ *Id*.



- 3. Defendants Disclose Class Members' Names And E-Mail Addresses to Google and Meta
- 110. *Google*. The dynamic analysis provided solid proof that Defendants were indeed sharing users' names and e-mail addresses with Google.
- 111. As mentioned above, an email address is a unique string of characters which designate an electronic mailbox.⁹⁰ And a person's first and last name undoubtedly identify that person.
- 112. The following image is an excerpt of the data sent from the Website to Google Analytics, as captured by the dynamic analysis. The excerpt shows Defendants disclosing a user's full name and e-mail address to Google when a user watches a pre-recorded video:

⁹⁰ See § III.A(4), supra.

p.Name=Bee Khoury&ep.Email=beegoodkay@gmail.com

113. *Meta.* The dynamic analysis also showed that Defendants were disclosing users' full names and e-mail addresses to Meta. The following excerpted network traffic from the web browser dynamic analysis shows Defendants disclosing a user's full name and e-mail address to Meta when a user watches a pre-recorded video:



- 114. Defendants disclose a Website user's e-mail address in an encrypted format called "SHA 256." Although Defendants disclose Website users' PII in this encrypted format, technological advances, including "the newest hardware (CPU and GPU) improvements" allow ordinary individuals to "decrypt SHA256." 191
- 115. However, even without access to the newest hardware technology, an ordinary person can reverse-engineer a SHA 256-encrypted code. The following screenshot shows a free online resource that enables individuals to encode and decode any text to and from SHA 256. The e-mail input into the "Data" field of the encryption tool below matches the disclosed Website user's

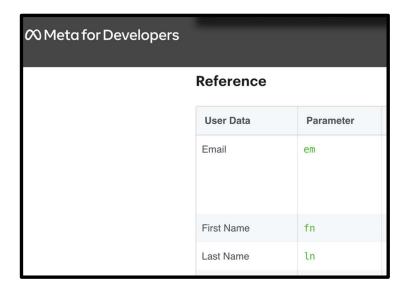
⁹¹ SHA 256 CALCULATOR, https://xorbin.com/tools/sha256-hash-calculator (last accessed Oct. 20, 2023); see also id. (explaining that SHA 256 is historically a one-way cryptographic hash function, which is akin to a signature for a set of data).

e-mail address, and the resulting encoded SHA 256 hash code matches the data in the network traffic that Plaintiffs' counsel caught in the Website dynamic analysis.

SHA-256 hash calculator SHA-256 produces a 256-bit (32-byte) hash value.
Data
beegoodkay@gmail.com
SHA-256 hash
428c0775ac7679dc5c288d4fe6af81c25fd59cdc2184e627cbfc9e829d4e2126

116. Meta acknowledges that clients such as Defendants transmit users' PII including, but not limited to, e-mail addresses, first names, and last names on its Developers website. Specifically, Meta's Reference sheet states that "em" stands for "Email," "fn" stands for "First Name," and "ln" stands for "Last Name." ⁹²

⁹² See REFERENCE, META, https://developers.facebook.com/docs/meta-pixel/advanced/advanced-matching (last accessed Oct. 22, 2023).



- 4. Defendants Disclose Information Identifying Which Specific Videos Were Watched By Which Specific Class Members To Google And Meta
- 117. *Google.* Defendants disclose to Google the full name and the URL of the video viewed by the user. For example, in the picture below of the network traffic captured in the dynamic analysis, the video title Defendants transmitted to Google is "On the Road of Courage":



118. Although Defendants disclose a watched video's title and URL in a separate transmission from the network transmission disclosing the user's full name and e-mail address, an ordinary person can still link the user's full name and e-mail address to the videos they watched. Each of Defendants' transmissions to Google—whether the transmission is disclosing only the user's full name and e-mail address or is disclosing a watched video's title and URL—contains the same unique identifying "cid." This "cid" is a unique string of numbers that Defendants assign to

each individual user. Thus, each user's "cid" is different, but every network transmission for the same user will contain the same "cid."

119. As demonstrated below, Plaintiffs' counsel captured network traffic where Defendants disclosed a user's PII to Google in two separate transmissions linked with the same unique "cid" identifier:

```
https://www.google-analytics.com/g/c
ollect?v=2&tid=G-9QQPTCLDHJ&gtm=45je
3bt0v9118766041& p=1701714035885&acd
=111111111118dma=0&cid=1176530243.170
1713821&ul=en-us&sr=1920x1200&uaa=&u
ab=&uafvl=&uamb=0&uam=&uap=&uapv=&ua
w=0&_s=6&sid=1701713820&sct=1&seg=1&
dl=https://www.chorki.com/user?token
=EC-6GS46308U49239237&dr=https://www
.paypal.com/&dt=Account
Settings&en=Customer initiated the
subscription
plan&_ee=1&ep.eventCategory=stripe&e
p.Name=Bee
Khoury&ep.Email=beegoodkay@gmail.com
&ep.userId=4fb42978-ba61-43c1-844d-c
e0b94716014&ep.subscriptionPlan=Enjo
```

https://www.google-analytics.com/collect?v=1&_v=j101&a=789377111&t=event &_s=2&dl=https://www.chorki.com/vide os/music-video-boyam-pakhi&ul=en-us&de=UTF-8&dt=Boyam Pakhi - Music Video | Chorki&sd=24-bit&sr=1920x1200&vp=1200x990&je=0&ec=player-video&ea=playVideo&el=Boyam Pakhi& u=SCCAAFT.JAAAAACAMT~&jid=&gjid=&cid=1176530243.1701713821&tid=UA-181767437-1&gid=767419697.1701713821&z=496124999

Transmission 1

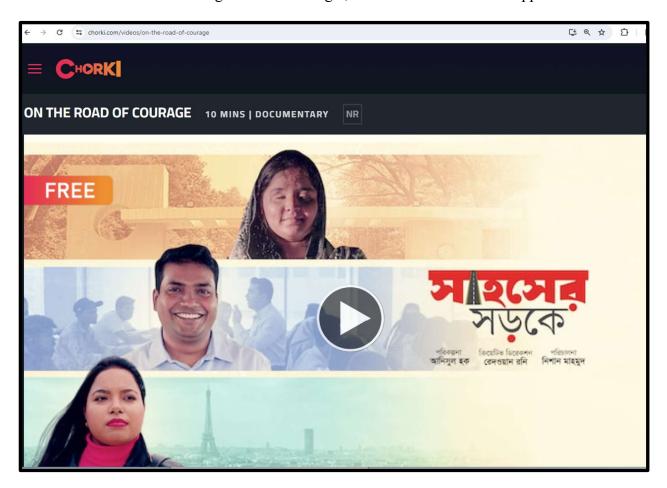
Transmission 2

120. Notably, a user's "cid" identifier remains the same throughout Defendants' subsequent transmissions of videos that user watches. The following screenshot depicts network traffic of Defendants disclosing the same user's exact same "cid" of "1176530243.1701713821" watching a different video:

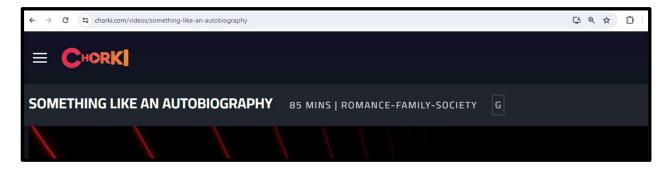
```
https://www.google-analytics.com/collect?v=1&_v=j101&a=333137326&t=event &_s=2&dl=https://www.chorki.com/vide os/on-the-road-of-courage&ul=en-us&d e=UTF-8&dt=On the Road of Courage | Chorki Release& sd=24-bit&sr=1920x1200&vp=1200x990&j e=0&ec=player-video&ea=playVideo&el=On the Road of Courage&_u=SCCAAEIJAAAAACAMI~&jid=&g jid=&cid=1176530243.1701713821&tid=U
```

121. *Meta.* Defendants disclose to Meta the full title and URL of the video a Website user watched. The following excerpted network traffic captured in the dynamic analysis shows Defendants disclosing to Meta the same watched video:

122. Although the disclosed video title is located in URL format, the URL corresponds to the exact watched pre-recorded video, and no other video. For example, when the disclosed URL is searched in a search engine such as Google, the user's watched video appears:

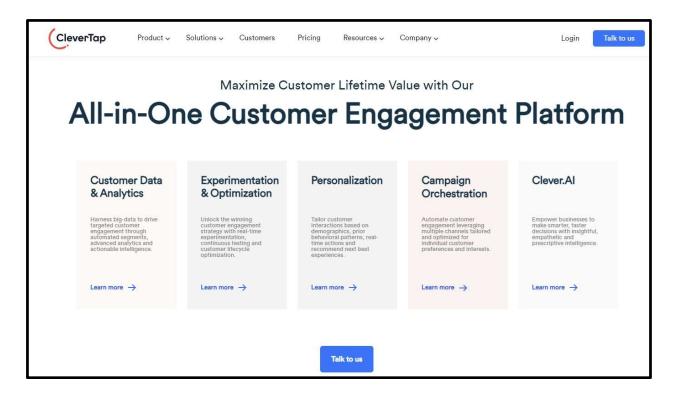


123. While searching the disclosed URL does lead to a webpage that has several additional videos listed under "Recommended For You," clicking on any of the recommended videos generates a new webpage with its own distinct URL:



- 124. Accordingly, the transmission of the URL/video title indicates that a user watched a specific video, not just that the user visited a webpage with multiple videos. Further, the page actually displays a video, rather than an article or other non-video content.
 - C. Defendants Disclose Personally Identifiable Information To Third Parties For The Purposes Of Marketing, Advertising, And Analytics
 - 1. Defendants Disclose Users' PII To CleverTap For The Purposes Of Marketing, Advertising, And Analytics
- 125. CleverTap's technology allows clients like Defendants to "[t]ailor customer interactions based on demographics, prior behavioral patterns, real-time actions and recommend next best experiences." 93

⁹³ PRODUCT OVERVIEW, CLEVERTAP, https://clevertap.com/product-overview/ (last accessed Sept. 27, 2023).



- 126. To create personalized content that engages and retains users, Defendants first disclose a user's PII to CleverTap.
- 127. CleverTap facilitates this process by formulating tools that allow Defendants to collect users' event and session data. Events are "what individual actions users perform in [the Chorki A]pp or website." Tracking events allows Chorki to "better understand what users are doing." A session is a period of continuous activity by the user." Among other things, "[a]nalyzing session length is a great way to measure [user] engagement." For example, the following screenshot depicts the most basic version of CleverTap's event tracker: 98

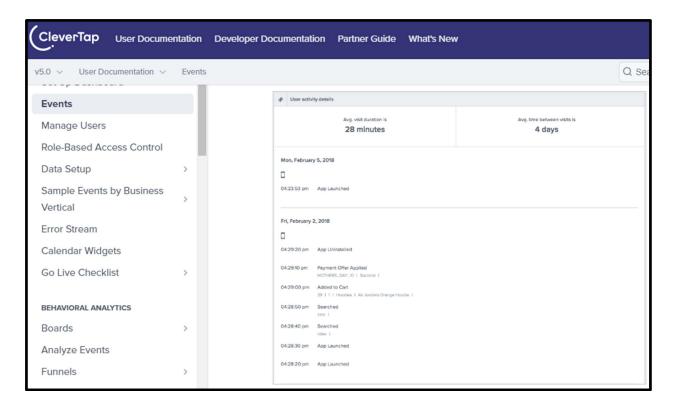
⁹⁴ EVENTS, CLEVERTAP, https://docs.clevertap.com/docs/events (last accessed Oct. 16, 2023).

⁹⁵ *Id*.

⁹⁶ SESSION ANALYTICS, CLEVERTAP, https://docs.clevertap.com/docs/session-analytics (last accessed Oct. 16, 2023).

⁹⁷ *Id*.

⁹⁸ EVENTS, CLEVERTAP, https://docs.clevertap.com/docs/events (last accessed Oct. 16, 2023).



- 128. CleverTap's technology then allows Defendants to analyze the collected event and session data.
- 129. "Analyzing events provides the capability to understand your audience's behavior on a comprehensive level." Among other capabilities, CleverTap's analytics technology allows clients such as Defendants to analyze collected user data by various properties and parameters:
 - "Quick View," which analyzes data for Defendants to show "all the basic details such as the number of events, the number of profiles, demographics, and sample profiles." 100
 - "Trends and Properties," which analyzes data for Defendants to show "events and people on a daily, weekly, and monthly duration," as well

⁹⁹ ANALYZE EVENTS, CLEVERTAP, https://docs.clevertap.com/docs/events-analytics (last accessed Oct. 16, 2023).

¹⁰⁰ ANALYZE EVENTS, CLEVERTAP, https://docs.clevertap.com/docs/events-analytics (last accessed Oct. 16, 2023).

- as "evaluate [a] selected event by its property and also view the frequency histogram chart for the same event." 101
- "Geography," which analyzes data for Defendants to show "event data" organized by "cities, regions, and countries." ¹⁰²
- "Technographics," which analyzes data for Defendants to show "event[s] based on the browsers, operating systems, and devices ... including OS version, app version, make, and model." 103
- "People," which analyzes data for Defendants to show "user profiles that performed the selected event, the percentage of demographics of users (women, men, others, unknown), and user properties." ¹⁰⁴
- 130. CleverTap analyzes Session data by "track[ing] the events that users perform within a session." CleverTap also analyzes the real impact of a customer's campaigns, allowing clients such as Defendants to "[v]isualize the boost in performance in ... target segments;" "[e]stimate what percentage of users have churned in the target group;" and "[c]alculate the segment-wise impact of essential business metrics and know which segments have been performing better" comparatively. 106
- 131. Once Defendants analyze users' raw data, it can then create and run targeted marketing and advertising campaigns. Taking CleverTap's results from these campaigns, Defendants are able to create strategically personalized marketing and advertising campaigns that conform with analytics results from CleverTap's reports.

¹⁰¹ *Id*.

 $^{^{102}}$ *Id*.

¹⁰³ *Id*.

¹⁰⁴ *Id*.

¹⁰⁵ SESSION ANALYTICS, CLEVERTAP, https://docs.clevertap.com/docs/session-analytics (last accessed Oct. 16, 2023).

¹⁰⁶ REAL IMPACT, CLEVERTAP, https://docs.clevertap.com/docs/real-impact (last accessed Oct. 16, 2023).

- 2. Defendants Disclose Users' PII To AWS For The Purposes Of Marketing, Advertising, And Analytics
- 132. Defendants transmit a user's e-mail address, user ID, and the full titles and URLS of watched videos to AWS so that AWS' "purpose-built" data analytics services help Defendants "quickly extract data insights." ¹⁰⁷
- 133. AWS does so in part by "provid[ing] a comprehensive set of analytics services." ¹⁰⁸
 AWS also offers assistance to clients to specifically target business analytics through services such Amazon Quicksight ¹⁰⁹ and solutions such as "Automated Data Analytics." ¹¹⁰
- 134. AWS "aligns the most purpose-built media and entertainment capabilities of any cloud against six solution areas ...: Content Production; Media Supply Chain & Archive; Broadcast; Direct-to-Consumer & Streaming; Data Science & Analytics; and Monetization." 111
- 135. These solutions can "build, discover, and share meaningful insight in seconds," so that clients like Defendants can "differentiate user experiences and unlock new monetization

¹⁰⁷ CAPABILITIES OF ANALYTICS ON AWS, AWS, https://aws.amazon.com/big-data/datalakes-and-analytics/?nc2=h ql prod an a (last accessed Feb 13, 2024).

ANALYTICS ON AWS, AWS, https://aws.amazon.com/big-data/datalakes-and-analytics/?sc_icampaign=aware_what-is-seo-pages&sc_ichannel=ha&sc_icontent=awssm-11373_aware &sc_iplace=ed&trk=edb040cb-3307-4428-90ec-83f484dc26bd~ha_awssm-11373_aware (last accessed Feb. 13, 2024).

¹⁰⁹ BUSINESS ANALYTICS, AWS, https://aws.amazon.com/what-is/business-analytics/ (last accessed Feb. 13, 2024); *see also* Amazon Quicksight, AWS, https://aws.amazon.com/quicksight/ (last accessed Feb. 13, 2024).

¹¹⁰ VISUALIZATION, REPORTING & ANALYSIS, AWS, https://aws.amazon.com/solutions/analytics/visualization-reporting-analysis/ (last accessed Feb. 13, 2024).

AWS FOR MEDIA & ENTERTAINMENT, AWS, https://aws.amazon.com/media/?nc2= h ql sol ind me (last accessed Feb. 13, 2024).

opportunities."¹¹² In short, AWS provides Defendants with a wealth of resources to conduct marketing, advertising, and analytics campaigns on the App.

- 3. Defendants Disclose Users' PII To Google Firebase For The Purposes Of Marketing, Advertising, and Analytics
- 136. Firebase is a mobile-centric app offered by Google. With Firebase, clients like Defendants can "[m]ix and match Firebase products to solve common app development challenges" and enhance their marketing, advertising, and analytics processes. 113
- 137. Specifically, Firebase offers technological solutions to "increase engagement" and "optimize[] user experience." Firebase does so by first gathering and analyzing user data to provide clients with a "custom view of key performance metrics." ¹¹⁴
- 138. This allows clients like Defendants to "[g]ain actionable insight into [their] app's performance." ¹¹⁵ Based on the insights that Firebase offers, Defendants can alter their app and personalize users' experiences by "dyamically changing" users' app experiences and experimenting with "specific user segments to see the impact of changes on key metrics." ¹¹⁶ Through engaging end users with these targeted changes, Defendants can then "keep [users] engaged in content and activities that they value." ¹¹⁷

¹¹² AMAZON QUICKSIGHT, AWS, https://aws.amazon.com/quicksight/ (last accessed Feb. 13, 2024).

¹¹³ APP DEVELOPMENT SOLUTIONS, FIREBASE, https://firebase.google.com/solutions (last accessed Feb. 13, 2024).

¹¹⁴ FIREBASE PERFORMANCE MONITORING, FIREBASE, https://firebase.google.com/products/performance (last accessed Feb. 13, 2024).

¹¹⁵ FIREBASE PERFORMANCE MONITORING, FIREBASE, https://firebase.google.com/products/performance (last accessed Feb. 13, 2024).

¹¹⁶ APP DEVELOPMENT SOLUTIONS, FIREBASE, https://firebase.google.com/solutions#monitor-app (last accessed Feb. 13, 2024).

¹¹⁷ *Id*.

- 139. Ultimately, Defendants can "[m]ake data-driven decisions" and "[m]aximize revenue by using machine learning to customize the best monetization strategy for each user." 118
 - 4. Defendants Disclose Users' PII To Google Analytics For The Purposes Of Marketing, Advertising, and Analytics
- 140. In addition to disclosing users' PII to Google Firebase, Defendants also disclose users' PII to Google via the Google Analytics platform for the purposes of marketing, advertising, and analytics.
- 141. Google Analytics, while serving as a core analytics function in Firebase, is also its own standalone offering in the Google Marketing Platform. With Google Analytics, Defendants can "[m]easure and report on user activity on websites, web and mobile apps, and internet-connected devices." 120
- 142. Analytics' reports allow Defendants to "[g]et a detailed view of user actions, system events, or errors." These reports help Defendants improve "app monetization" by uncovering "how users reach[ed Defendants'] site or app" in real time. 122
- 143. Notably, Analytics' machine learning models save Defendants time and effort by "predict[ing] future actions people may take" after analyzing user data. 123 These 'audiences' or

¹¹⁸ *Id*.

¹¹⁹ See Brad Bender, Introducing Google Marketing Platform, GOOGLE MARKETING PLATFORM, June 27, 2018, https://www.blog.google//products/marketingplatform/360/introducing-google-marketing-platform/.

¹²⁰ DEVELOPERS, GOOGLE ANALYTICS, https://developers.google.com/analytics (last accessed Feb. 13, 2024).

FEATURES, ANALYTICS 360, https://marketingplatform.google.com/about/analytics-360/features/ (last accessed Feb. 13, 2024).

 $^{^{122}}$ *Id*

FEATURES, ANALYTICS 360, https://marketingplatform.google.com/about/analytics-360/features/ (last accessed Feb. 13, 2024).

groups of users defined by their predicted capacity to undertake certain future actions can then be targeted "to take these actions" and "drive conversions or retain more" users. 124

- 144. Analytics' features help Defendants understand how users decide to pay for a subscription, improve their site based on feedback to increase user retention, and predicted how enhance user experiences can lead to increased monetization.
 - 5. Defendants Disclose Users' PII To Meta For The Purposes Of Marketing, Advertising, and Analytics
- 145. Defendants disclose a user's PII including full name, hashed e-mail address, and video-viewing information in the form of unique web URL to Meta via the Meta Tracking Pixel and Facebook SDK so that Meta can "personali[ze] content, tailor[] and measur[e] ads, and provid[e] a safer experience" for Chorki users of both the App and Website. 125
- 146. The Meta Pixel allows Defendants "to track [their] website visitors' actions," which Meta calls conversion tracking. 126 "Tracked conversions ... can be used to analyze [Defendants'] return on ad investment." 127
- 147. Notably, "[e]ach time the Pixel loads, it automatically ... track[s]" and records the URL that a Website user viewed. 128 In other words, so long as Defendants have installed the Meta Tracking Pixel onto Chorki.com, anyone who views that webpage—meaning all Website users—

¹²⁴ *Id*.

¹²⁵ COOKIES POLICY, META, https://www.facebook.com/privacy/policies/cookies/?entry_point=cookie_policy_redirect&entry=0 (last accessed Oct. 20, 2023).

CONVERSION TRACKING, META, https://developers.facebook.com/docs/meta-pixel/implementation/conversion-tracking (last accessed Oct. 22, 2023).

¹²⁷ Id

¹²⁸ CUSTOM CONVERSIONS, META, https://developers.facebook.com/docs/meta-pixel/implementation/conversion-tracking#custom-conversions (last accessed Oct. 22, 2023).

"will be tracked using that" automatic URL tracker. And, as mentioned above, the tracked URL discloses to Meta the exact video(s) that a Website user views. Indeed, Meta even warns advertisers such as Defendants to "make sure" the Website URLs are specific enough that Defendants "can define visitor actions exclusively based on unique ... website URLs." 130

- 148. "Once tracked, custom conversions"—such as the URL tracking tool—"can be used to optimize [Defendants'] ad campaigns" through other Meta tools such as Ads Insights. 132
- 149. Defendants utilize Meta's comprehensive array of tracking and analytics tools to optimize its marketing, advertising, and analytics—ultimately increasing its viewer base and subscription revenue.

D. Defendants Knowingly Disclose Theirs Users' PII To The Third Parties

- 150. Based on the above—and Defendants' admissions in their Privacy Policy—it is abundantly clear that Defendants *intentionally* and *knowingly* disclose the Third Parties via the Third Parties' respective SDKs, the Google tag, and the Meta Tracking Pixel their users' personally identifiable information and video-viewing information.
- 151. *CleverTap*. Defendants *intentionally* and *knowingly* disclose users' PII to CleverTap via the CleverTap SDK. CleverTap's entire business model revolves around acquiring "in-depth [c]ustomer [i]nsights," analyzing those insights, and optimizing users' experience for maximum customer engagement and retention. 133

¹²⁹ *Id*.

¹³⁰ *Id*.

¹³¹ *Id*.

CUSTOM CONVERSIONS INSIGHTS, META, https://developers.facebook.com/docs/meta-pixel/implementation/conversion-tracking#custom-conversions (last accessed Oct. 22, 2023).

¹³³ CLEVERTAP, https://clevertap.com/ (last accessed Feb. 13, 2024).



- 152. CleverTap is a for-profit company that requires payment and significant technological integration before the CleverTap SDK could collect and analyze user data. In other words, the only way that CleverTap would receive Chorki users' information is if Defendants knowingly and intentionally disclosed users' PII to CleverTap (while presumably paying for CleverTap's data collection and analytics services).
- 153. *AWS*. Defendants *intentionally* and *knowingly* disclose users' PII to AWS via the AWS SDK, enabled through Defendants' partnership with Viewlift.



- 154. It is no coincidence that Defendants choose to intentionally disclose user data to AWS through their partnership with Viewlift. In fact, Viewlift's partnership with Chorki was so successful that Viewlift features Chorki as a case study on its website.¹³⁴
- 155. Specifically, Viewlift boasts: "Chorki's great content inventory, combined with ViewLift's ability to deliver a seamless and personalized viewing experience along with 360-degree analytics, has been instrumental in the company's success." Accordingly, Defendants have admitted that they intentionally and knowingly disclose users' PII to AWS through its Viewlift partnership to enhance their marketing, advertising, and analytics processes.
- 156. *Google Firebase and Google Analytics*. Defendants *intentionally* and *knowingly* disclose users' PII to Google via the Firebase SDK and the Google tag. Chorki clearly states on its website that "technologies used on the [Chorki] Platform to collect [users'] Usage Information" include "mobile analytics software and pixel tags." ¹³⁶
- 157. Defendants also actively recruit software professionals who have experience with Google Analytics. For instance, in December of 2022, Defendants were looking to hire a Product Manager at Chorki. Listed among the position's responsibilities on the job application was "[e]xperience in setting up and managing ... Google Analytics." ¹³⁷

¹³⁴ See Chorki Sees 4X Growth in SVOD Users in 1 Year, Viewlift, https://viewlift.com/resources/case-study/chorki-sees-4x-growth-in-svod-users-in-1-year/ (last accessed Feb. 12, 2024).

¹³⁵ CHORKI SEES 4X GROWTH IN SVOD USERS IN 1 YEAR, CASE STUDY, https://viewlift.com/wp-content/uploads/2022/12/cs-chorki.pdf.

¹³⁶ PRIVACY POLICY, CHORKI, https://www.chorki.com/privacy-policy (last accessed Feb. 13, 2024).

¹³⁷ CHORKI JOB APPLICATION, FACEBOOK KORE SEARCH, https://m.facebook.com/9986063 03674804/posts/2122875971247826/? rdr (last accessed Feb. 13, 2024).

- 158. *Meta.* Defendants *intentionally* and *knowingly* disclose App users' PII to Meta via the Meta SDK and Website users' PII to Meta via the Meta Tracking Pixel so that the Pixel can better measure and analyze Chorki.com users' activities.
- 159. Defendants do this by leveraging Meta's full suite of measurement tools that come complete with "analytics[and] A/B tests." A/B Testing with Meta allows clients like Defendants to compare two test versions of an ad strategy or campaign and determine which version performs best to which audiences before applying their marketing strategies. For example, the Pixel and the Facebook SDK both track events like ad clicks, "website visits," and "purchases." 140
- 160. Defendants can then build marketing campaigns based on the analyses from Meta's measurement reports. Notably, the Meta Pixel and the Facebook SDK can also provide "tools to re-engage existing customers, as well as people who have visited [the Chorki] website" or app. 141 Defendants use Meta's ability to analyze user data, target specific users or groups of users for advertisements, and launch marketing campaigns in conjunction with Meta's other technological offerings to monetize Defendants' App and Website and maximize revenue.
- 161. Accordingly, Defendants have admitted that they leverage the CleverTap, AWS, Firebase, and Facebook SDKs, as well as Google Analytics' Google tag and the Meta Tracking Pixel, to intentionally and knowingly drive revenue on the Chorki App and Website through marketing, advertising, and analytics.

¹³⁸ RE-ENGAGE, META BUSINESS GOALS, https://www.facebook.com/business/goals/reengage-customers/agencies#step-1 (last accessed Feb. 14, 2024).

¹³⁹ See ABOUT A/B TESTING, META BUSINESS HELP CENTER, https://www.facebook.com/business/help/1738164643098669?id=445653312788501 (last accessed Feb. 14, 2024).

¹⁴⁰ RE-ENGAGE, META BUSINESS GOALS, https://www.facebook.com/business/goals/reengage-customers/agencies#step-1 (last accessed Feb. 14, 2024).

¹⁴¹ RE-ENGAGE, META BUSINESS GOALS, https://www.facebook.com/business/goals/reengage-customers/agencies#step-1 (last accessed Feb. 14, 2024).

162. Moreover, common sense dictates that a sophisticated international streaming service like Defendants, who include several data collection and analysis APIs into its App, as well as partners with a Google and Meta to incorporate their respective tracking technology into its Website, is fully aware of the scope of the data that these third parties are collecting. This shows that Defendants are choosing to intentionally provide that data to CleverTap, AWS, Firebase, Google Analytics, and Meta in order to obtain their analyzing, marketing, and advertising services.

IV. EXPERIENCES OF PLAINTIFFS

A. Experience Of Plaintiff Muzakkir Hossain

- 103. In or about May 2022, Plaintiff Hossain created a Chorki account and downloaded the App on his Apple iphone. Plaintiff Hossain has used the same account on the App since May 2022. Plaintiff Hossain most recently watched a pre-recorded video through his account in the Chorki iOS App in or about October 2023. Between May 2022 and October 2023, Plaintiff Hossain used the mobile Chorki App on his iphone to watch various videos from his account.
- 104. Through purchasing a subscription to Defendants' video streaming service, Plaintiff Hossain acquired exclusive access to Defendants' pre-recorded video content.
- 105. At all relevant times, Plaintiff Hossain never consented, agreed, nor otherwise permitted the App to disclose his PII to third parties.
- 106. Likewise, Defendants never gave Plaintiff Hossain the opportunity to prevent the App from disclosing his PII to third parties.
- 107. Nevertheless, each time Plaintiff Hossain viewed a video on the Chorki App, Defendants disclosed his PII to AWS, Google Firebase, and Meta via their respective SDKs. Specifically, Defendants disclosed to AWS Plaintiff Hossain's: (i) e-mail address; (ii) user ID; and (iii) video-viewing information in the form of the video title and video ID for each specific video watched by Plaintiff Hossain. To Firebase, Defendants disclosed Plaintiff Hossain's; (i) e-mail

address; (ii) user ID; and (iii) video-viewing information in the form of the video title and video ID for each specific video he watched. And to Meta, Defendants similarly disclosed Plaintiff Hossain's: (i) e-mail address; (ii) user ID; and (iii) video-viewing information in the form of the video title, video metadata such as actor and genre, and video ID for each specific video Plaintiff Hossain watched.

- 108. Using this information, AWS was able to identify Plaintiff Hossain and attribute his video viewing records to an individualized profile of Plaintiff Hossain in its databases. Indeed, even an ordinary person could identify Plaintiff Hossain using the data Defendants disclosed to AWS. AWS compiled Plaintiff Hossain's PII and Plaintiff Hossain's activity on the App, which Defendants use for marketing, advertising, and analytics purposes.
- 109. In addition, Firebase was able to identify Plaintiff Hossain and attribute his video viewing records to an individualized profile of Plaintiff Hossain in its databases using the PII that Defendants disclosed via the Firebase SDK. Indeed, even an ordinary person could identify Plaintiff Hossain using the data Defendants disclosed to Firebase. Firebase compiled Plaintiff Hossain's PII and Plaintiff Hossain's activity on the App, which Defendants use for marketing, advertising, and analytics purposes.
- 110. Further, using the PII of Plaintiff Hossain that Defendants disclosed to Meta via the Facebook SDK, Meta was able to identify Plaintiff Hossain and attribute his video viewing records to an individualized profile of Plaintiff Hossain in its databases. Indeed, even an ordinary person could identify Plaintiff Hossain based on the data Defendants disclosed to Meta. Meta compiled Plaintiff Hossain's PII and Plaintiff Hossain's activity on the App, which Defendants use for marketing, advertising, and analytics purposes.

B. Experience Of Plaintiff Shakhawat Hassan

- 111. In or about April 2023, Plaintiff Hassan created a Chorki account and downloaded the App on his Apple iphone. Plaintiff Hassan has used the same account on the App since April 2023. Plaintiff Hassan most recently watched a pre-recorded video through his account in the Chorki iOS App in or about October 2023. Between April 2023 and October 2023, Plaintiff Hassan used the mobile Chorki App on his iphone to watch various videos from his account.
- 112. Through purchasing a subscription to Defendants' video streaming service, Plaintiff Hassan acquired exclusive access to Defendants' pre-recorded video content.
- 113. At all relevant times, Plaintiff Hassan never consented, agreed, nor otherwise permitted the App to disclose his PII to third parties.
- 114. Likewise, Defendants never gave Plaintiff Hassan the opportunity to prevent the App from disclosing his PII to third parties.
- 115. Nevertheless, each time Plaintiff Hassan viewed a video on the Chorki App, Defendants disclosed his PII to AWS, Google Firebase, and Meta via their respective SDKs. Specifically, Defendants disclosed to AWS Plaintiff Hassan's: (i) e-mail address; (ii) user ID; and (iii) video-viewing information in the form of the video title and video ID for each specific video watched by Plaintiff Hassan. To Firebase, Defendants disclosed Plaintiff Hassan's; (i) e-mail address; (ii) user ID; and (iii) video-viewing information in the form of the video title and video ID for each specific video he watched. And to Meta, Defendants similarly disclosed Plaintiff Hassan's: (i) e-mail address; (ii) user ID; and (iii) video-viewing information in the form of the video title, video metadata such as actor and genre, and video ID for each specific video Plaintiff Hassan watched.
- 116. Using this information, AWS was able to identify Plaintiff Hassan and attribute his video viewing records to an individualized profile of Plaintiff Hassan in its databases. Indeed,

even an ordinary person could identify Plaintiff Hassan using the data Defendants disclosed to AWS. AWS compiled Plaintiff Hassan's PII and Plaintiff Hassan's activity on the App, which Defendants use for marketing, advertising, and analytics purposes.

- 117. In addition, Firebase was able to identify Plaintiff Hassan and attribute his video viewing records to an individualized profile of Plaintiff Hassan in its databases using the PII that Defendants disclosed via the Firebase SDK. Indeed, even an ordinary person could identify Plaintiff Hassan using the data Defendants disclosed to Firebase. Firebase compiled Plaintiff Hassan's PII and Plaintiff Hassan's activity on the App, which Defendants use for marketing, advertising, and analytics purposes.
- 118. Further, using the PII of Plaintiff Hassan that Defendants disclosed to Meta via the Facebook SDK, Meta was able to identify Plaintiff Hassan and attribute his video viewing records to an individualized profile of Plaintiff Hassan in its databases. Indeed, even an ordinary person could identify Plaintiff Hassan based on the data Defendants disclosed to Meta. Meta compiled Plaintiff Hassan's PII and Plaintiff Hassan's activity on the App, which Defendants use for marketing, advertising, and analytics purposes.

PARTIES

- 119. Plaintiff Muzakkir Hossain is, and has been at all relevant times, a resident of New York and has an intent to remain there. Plaintiff Hossain is therefore a citizen of New York.
- 120. Plaintiff Shakhawat Hassan is, and has been at all relevant times, a resident of New York and has an intent to remain there. Plaintiff Hassan is therefore a citizen of New York.
- 121. Defendant Mediastar Limited d/b/a Chorki is a corporate entity incorporated in and with its principal place of business in a foreign state—Bangladesh. Defendant Mediastar Limited is therefore a foreign company. Defendant Mediastar Limited develops, owns, and operates the Chorki App and website, which are used throughout the United States.

122. Defendant Transcom Limited is a corporate entity incorporated in and with its principal place of business in a foreign state—Bangladesh. Defendant Transcom Limited owns Defendant Mediastar Limited.

JURISDICTION AND VENUE

- 123. This Court has subject matter jurisdiction over this action pursuant to 28 U.S.C. § 1331 because it arises under a law of the United States (the VPPA).
- 124. This Court has personal jurisdiction over Defendants Chorki and Transcom pursuant to Fed. R. Civ. P. 4(k)(2) because Defendants conduct substantial business in the United States such that they have purposefully availed themselves of the privilege of doing business in the United States. Further, Defendants Chorki and Transcom are not subject to jurisdiction in any state's courts of general jurisdiction, and for this Court to exercise jurisdiction over Defendants would be consistent with the United States Constitution and laws.
- 125. This Court also has personal jurisdiction over Defendants because Defendants collected and disseminated users' personally identifiable information giving rise to this lawsuit in this District, and the conduct giving rise to this action arises out of and relates to that business.
- 126. Venue is proper in this District pursuant to 28 U.S.C. § 1391(c)(3) because Defendants Chorki and Transcom Limited are both foreign corporations and may be sued in any judicial district.

CLASS ALLEGATIONS

127. **Class Definition**: Plaintiffs Hossain and Hassan seek to represent a class of similarly situated individuals defined as all persons in the United States who used the Chorki App to watch videos and had their PII transmitted to a third party without consent.

- 128. Subject to additional information obtained through further investigation and discovery, the above-described Class may be modified or narrowed as appropriate, including through the use of multi-state subclasses.
- 129. **Numerosity** (Fed. R. Civ. P. 23(a)(1)): At this time, Plaintiffs do not know the exact number of members of the aforementioned Class. However, given the popularity of Defendants' pre-recorded video subscription service, the number of persons within the Class is believed to be so numerous that joinder of all members is impractical.
- 130. Commonality and Predominance (Fed. R. Civ. P. 23(a)(2), 23(b)(3)): There is a well-defined community of interest in the questions of law and fact involved in this case. Questions of law and fact common to the members of the Class that predominate over questions that may affect individual members of the Class include:
 - (a) whether Defendants collected PII from Plaintiffs and the Class members;
 - (b) whether Defendants unlawfully disclosed and continue to disclose their users' PII, including their video-viewing records, in violation of the VPPA;
 - (c) whether Defendants' disclosures were committed knowingly; and
 - (d) whether Defendants disclosed the Plaintiffs' and the Class members' PII without consent.
- 131. **Typicality (Fed. R. Civ. P. 23(a)(3))**: Plaintiffs' claims are typical of those of the Class because Plaintiffs, like all members of the Class, paid for a subscription to Defendants' video streaming service and used the Chorki App to watch pre-recorded videos. And like all members of the Class, Plaintiffs then consequently had their PII collected and disclosed by Defendant without providing consent.
- 132. Adequacy (Fed. R. Civ. P. 23(a)(4)): Plaintiffs have retained and are represented by qualified and competent counsel who are highly experienced in complex consumer class action

litigation, including litigation concerning the VPPA. Plaintiffs and their counsel are committed to vigorously prosecuting this class action. Moreover, Plaintiffs are able to fairly and adequately represent and protect the interests of the Class. Neither the Plaintiffs nor their counsel have any interest adverse to, or in conflict with, the interests of the absent members of the Class. Plaintiffs have raised viable statutory claims of the type reasonably expected to be raised by members of the Class and will vigorously pursue those claims. If necessary, Plaintiffs may seek leave of this Court to amend this Class Action Complaint to include additional representatives to represent the Class, additional claims as may be appropriate, or to amend the definition of the Class to address any steps that Defendants took.

133. Superiority (Fed. R. Civ. P. 23(b)(3)): A class action is superior to other available methods for the fair and efficient adjudication of this controversy because individual litigation of the claims of all members of the Class is impracticable. Even if every member of the Class could afford to pursue individual litigation, the court system could not. It would be unduly burdensome to the courts in which individual litigation of numerous cases would proceed. Individualized litigation would also present the potential for varying, inconsistent or contradictory judgments, and would magnify the delay and expense to all parties and to the court system resulting from multiple trials of the same factual issues. By contrast, the maintenance of this action as a class action, with respect to some or all of the issues presented herein, presents few management difficulties, conserves the resources of the parties and of the court system, and protects the rights of each member of the Class. Plaintiffs anticipate no difficulty in the management of this action as a class action.

CAUSES OF ACTION

COUNT I Violation Of The VPPA 18 U.S.C. § 2710

- 134. Plaintiffs incorporate the foregoing allegations as if fully set forth herein.
- 135. Plaintiffs bring this claim individually and on behalf of the members of the proposed Class against Defendants.
- 136. Defendants constitute "video tape service provider[s]" as defined by the VPPA because they "engage in the business, in or affecting interstate or foreign commerce, of rental, sale, or delivery of prerecorded video cassette tapes or similar audio visual materials," 18 U.S.C. § 2710(a)(4), inasmuch as Defendants provides video (*i.e.*, "similar audio visual materials" under the VPPA's definition) to consumers via the Chorki App.
- 137. Plaintiffs and Class Members are "consumers" as defined by the VPPA because they paid for subscriptions to Chorki, signed up with their names and e-mail addresses, obtained the exclusive benefit of accessing premium Chorki video content, and subsequently watched videos through those accounts on the Chorki mobile application, either on the Android or iOS versions. 18 U.S.C. § 2710(a)(1). Under the VPPA, this means that they were "subscriber[s]" of "goods or services from a video tape service provider." 18 U.S.C. § 2710(a)(1).
- 138. That is, through their creation of an account on Defendants' App, the purpose of which is to provide pre-recorded video content to users, Plaintiffs and Class Members provided additional information that was used to track them without their consent and received benefits in exchange, and therefore are "subscribers" because they registered, committed, and expressed association with the Chorki App.
- 139. Plaintiffs and Class Members viewed prerecorded video clips using either the Android or iOS versions of the App. During these occasions, the App disclosed Plaintiffs' and

Class members' PII—including their e-mail addresses and records of the videos that they viewed—to third party analytics companies AWS, Google Firebase, and Meta.

- 140. The App's transmissions of Plaintiffs and Class Members' PII to AWS, Google Firebase, and Meta constitute "knowing[] disclosures" of their "personally identifiable information" to a person as proscribed by the VPPA. 18 U.S.C. § 2710(a)(1).
- 141. Under the VPPA, the term "personally identifiable information" "includes information which identifies a person as having requested or obtained specific video materials or services from a video tape service provider." 18 U.S.C. § 2710(a)(3). The definition's usage of the word "includes" means that a more expansive reading of the term was expressly contemplated.
- 142. The information disclosed by the Chorki App constitutes "personally identifiable information" in this context because it would allow an ordinary person—let alone AWS, Google Firebase, and Meta—to identify Plaintiffs and Class Members, and which specific videos they viewed.
- 143. Plaintiffs and Class Members did not provide Defendants with any form of consent—either written or otherwise—to disclose their PII to third parties.
- 144. Nor were Defendants' disclosures made in the "ordinary course of business" as the term is defined by the VPPA. In particular, the App's disclosures to AWS, Google Firebase, and Meta were not necessary for "debt collection activities, order fulfillment, request processing, [or] transfer of ownership." 18 U.S.C. § 2710(a)(2).
- 145. On behalf of themselves and the proposed Class, Plaintiffs seek: (i) declaratory relief; (ii) injunctive and equitable relief as is necessary to protect the interests of Plaintiffs Hossain, Hassan, and the Class by requiring Defendants to comply with VPPA's requirements for protecting a consumer's PII; (iii) statutory damages of \$2,500 for each violation of the VPPA

pursuant to 18 U.S.C. § 2710(c); and (iv) reasonable attorneys' fees and costs and other litigation expenses.

PRAYER FOR RELIEF

WHEREFORE, Plaintiffs Muzakkir Hossain and Shakhawat Hassan seek a judgment against Defendants, individually and on behalf of all others similarly situated, as follows:

- (a) For an order certifying the Nationwide Class under Rule 23 of the Federal Rules of Civil Procedure and naming Plaintiffs Hossain and Hassan as representatives of the proposed Class; and Plaintiffs' attorneys as Class Counsel to represent the Class;
- (b) For an order declaring that Defendants' conduct violates the VPPA referenced herein;
- (c) For an order finding in favor of Plaintiffs and the Class on all counts asserted herein;
- (d) For an award of statutory damages to the extent available;
- (e) For punitive damages, as warranted, in an amount to be determined at trial;
- (f) For prejudgment interest on all amounts awarded;
- (g) For injunctive relief as pleaded or as the Court may deem proper; and
- (h) For an order awarding Plaintiffs and the Class their reasonable attorneys' fees and expenses, as well as costs of suit.

JURY DEMAND

Pursuant to Fed. R. Civ. P. 38(b)(1), Plaintiffs demand a trial by jury of all issues so triable.

Dated: February 16, 2024 Respectfully submitted,

By: <u>/s/ Yitzchak Kopel</u> Yitzchak Kopel

BURSOR & FISHER, P.A.

Yitzhak Kopel Max S. Roberts Victoria X. Zhou 1330 Avenue of the America, 32nd Floor New York, NY 10019 Telephone: (646) 837-7150

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Facsimile: (212) 989-9163 E-Mail: ykopel@bursor.com mroberts@bursor.com vzhou@bursor.com

Attorneys for Plaintiffs